

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application.

1. (Currently Amended) A ~~virtual-private~~ network comprising: including an internal secured portion which connects via at least a first gateway and a second gateway to an external portion, the network comprising:

an internal secured portion;

an external portion;

a plurality of workstations including at least one mobile workstation node in the external portion;

the at least a first gateway; and

the at least a second gateway, where the internal secured portion connects via the first gateway and the second gateway to the external portion, and

the network is configured to change the gateway, which the mobile node uses to communicate with the internal secured portion, from the first gateway to the second gateway in response to movement of the mobile node and in response to a receipt from the mobile node of a new care-of-address that is different from a first care-of-address.

~~means for automatically changing point through which the mobile workstation communicates with the internal portion of the network from the first gateway to the second gateway, in response to movement of the mobile workstation.~~

2. (Currently Amended) A network as claimed in claim 1, further ~~comprising~~ configured to transfer means for transferring context information usable by a gateway in communications with the mobile ~~workstation~~ node, to the second gateway.

3. (Currently Amended) A network as claimed in claim 2, wherein the context information includes an identifier of the mobile ~~workstation~~ node.

4. (Currently Amended) A network as claimed in claim 3 wherein the identifier is ~~the~~ a home

address of the mobile ~~workstation~~ node.

5. (Currently Amended) A network as claimed in claim 2, wherein the context information includes material for defining secure communication means by which information is transferable securely between the mobile ~~workstation~~ node in the external portion of the network and the internal secured portion of the network, via the second gateway.

6. (Currently Amended) A network as claimed in claim 5, wherein the secure communication means is a security association pair between the second gateway and the mobile ~~workstation~~ node.

7. (Currently Amended) A network as claimed in claim 2, wherein the context information is transferred from a location that ~~the transfer means~~ is physically separate from the first gateway.

8. (Currently Amended) A network as claimed in claim 2, ~~wherein the transfer means~~ further configured to additionally transfers transfer information to the mobile ~~workstation~~ node for enabling communications between the mobile ~~workstation~~ node and the second gateway.

9. (Currently Amended) A network as claimed in claim 8 wherein the information transferred to the mobile ~~workstation~~ node enables secure communication means by which information is transferable securely between the mobile ~~workstation~~ node in the external portion of the network and the internal secured portion of the network, via the second gateway.

10. (Currently Amended) A network as claimed in claim 9, wherein the secure communication means is a security association pair between the mobile ~~workstation~~ node and the second gateway.

11. (Currently Amended) A network as claimed in claim 8, wherein the information transferred to the mobile ~~workstation~~ node comprises ~~the~~ an address of the second gateway.

12. (Currently Amended) A network as claimed in claim 8, wherein the information transferred to

the mobile ~~workstation node~~ is transferred between the first gateway and the mobile workstation using an existing security association between the mobile ~~workstation node~~ and the first gateway.

13.(Currently Amended) A network as claimed in claim 1 wherein the second gateway comprises one or more databases which are updated to enable the internal secured portion of the network and the mobile ~~workstation node~~ in the external portion of the network to communicate via the second gateway.

14. (Currently Amended) A network as claimed in claim 13, wherein the one or more databases are a ~~Security Policy Database~~ security policy database and a ~~Security Association Database~~ security association database.

15. (Currently Amended) A network as claimed in claim 1 wherein the mobile ~~workstation node~~ comprises one or more databases which are updated to enable the internal secured portion of the network and the mobile ~~workstation node~~ in the external portion of the network to communicate via the second gateway.

16. (Currently Amended) A network as claimed in claim 15, wherein the one or more databases are a ~~Security Policy Database~~ security policy database and a ~~Security Association Database~~ security association database.

17. (Currently Amended) A network as claimed in claim 1 ~~further comprising location detection means for detecting~~ further configured to detect the a present location of the mobile ~~workstation node~~ and ~~initiating~~ initiate a change in the ~~point gateway~~ through which the mobile ~~workstation node~~ communicates with the internal secured portion of the network, from the first gateway to a better gateway.

18. (Currently Amended) A network as claimed in claim 17, wherein the better gateway is better because it is either closer to the mobile ~~workstation node~~ and/or it is optimal for routing existing sessions.

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Currently Amended) A network as claimed in claim 17, ~~wherein the location detection means~~ further configured to detect a present location from a source that is separate from the first gateway.

23. (Currently Amended) A network as claimed in claim 22, ~~wherein the transfer means~~ further configured to transfer information from a source that is physically separate from the first gateway and wherein ~~the location detection means and transfer means~~ source to transfer information and the source to detect a present location are housed together.

24. (Previously Presented) A network as claimed in claim 1 wherein the first gateway and the second gateway are in distinct physically separated segments of the network.

25. (Currently Amended) A network as claimed in claim 1, wherein the mobile ~~workstation~~ node communicates with the internal secured portion of the network via the first gateway and also via the second gateway simultaneously for a transition period, before communicating via the second gateway only.

26. (Currently Amended) A network as claimed in claim 1 wherein the mobile ~~workstation~~ node is involved in a session with a correspondent node.

27. (Currently Amended) A network as claimed in claim 26, wherein the correspondent node is located in the internal secured portion of the network and the mobile ~~workstation~~ node is located in the external portion of the network.

28. (Currently Amended) A method comprising: ~~of optimizing the route by which information~~

~~travels between a mobile node in an external portion of a network and a correspondent node in an internal portion of a network, comprising the steps of:~~

determining when a first serving gateway through which ~~the~~ a mobile node communicates from an external portion of a network with an ~~the~~ internal secured portion of the network, is sub-optimal;

identifying a second gateway; and

in response to the mobile node moving and sending a new care-of-address that is different from a first care-of-address to the first serving gateway, transferring ~~the point~~ the gateway through which the mobile node communicates with the internal portion of the network from the first serving gateway to the second gateway.

29. (Currently Amended) A mobile ~~workstation node~~ for connecting to an external portion of a network that includes an internal secured portion connected, via a first gateway and a second gateway to the external portion, comprising: configured to ~~means arranged to~~ receive, via ~~the~~ a first secure communication means, an identifier of a second gateway; and ~~means arranged~~ and further configured to change from communicating with the internal secured portion of the network through the first gateway to communicating via the second gateway, in response to moving and sending a new care-of-address that is different from a first care-of-address to the first gateway.

30. (Currently Amended) ~~A mobile workstation~~ The network as claimed in claim 23, further ~~comprising means~~ configured for using a first secure communication means by which information is transferable securely between the internal secured portion of the network and the mobile ~~workstation node~~ via the first gateway, to receive ~~the~~ an identifier of the second gateway.

31. (Currently Amended) ~~A mobile workstation~~ The network as claimed in claim 23, further ~~comprising means~~ configured for using a second secure communication means to transfer information securely between the internal secured portion of the network and the mobile ~~workstation node~~ via the second gateway.

32. (New) A method comprising:

moving in an external portion of a network, where the network comprises an internal secured portion, the external portion, at least a first gateway, and at least a second gateway;
obtaining a location identifier, where the location identifier comprises a new care-of-address different from a first care-of-address;
sending the new care-of-address to the first gateway; and
in response to receiving an acknowledgement from the second gateway, communicating via the second gateway.

33. (New) A method comprising:

receiving a new care-of-address that is different from a first care-of-address from a mobile node that has moved in a network; and
updating a location database in order to change an identification of a gateway that the mobile node uses to communicate from an external portion of the network to an internal secured portion of the network.

34. (New) An apparatus configured to:

receive a new care-of-address that is different from a first care-of-address from a mobile node that has moved in a network; and
update a location database in order to change an identification of a gateway that the mobile node uses to communicate from an external portion of the network to an internal secured portion of the network.